ORDINANCE NO. 09-15

AN ORDINANCE AMENDING ARTICLE 22 TO CHAPTER 10 OF THE HAYWARD MUNICIPAL CODE ESTABLISHING GREEN BUILDING REQUIREMENTS FOR PRIVATE DEVELOPMENT

THE CITY COUNCIL OF THE CITY OF HAYWARD DOES ORDAIN AS FOLLOWS:

Section 1. Purpose. The purpose of this Article is to promote the health, safety and welfare of Hayward residents, workers and visitors by minimizing the use and waste of energy, water and other natural resources in the construction and operation of the City's building stock and by providing a healthy indoor environment. The green building practices required by this Article will encourage resource conservation, reduce waste generated by construction projects, increase energy efficiency and promote the health and productivity of residents, workers, and visitors of the City.

The City is proposing to adopt various enumerated changes and modifications to the California Building Standards Code ("Code"), as set forth in Section 3 below. Health and Safety Code Sections 17958, 17958.5 and 17958.7 permit cities and counties to make such changes or modifications in the Code as they determine are reasonably necessary because of "local climatic, geological, or topographical conditions". The City Council does hereby find and declare that the changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions in accordance with Health and Safety Code Sections 17958.5 and 17958.7.

Section 2. Findings. The City Council of the City of Hayward hereby finds that:

- a. The design, construction, and maintenance of buildings and structures within the City can have a significant impact on the City's environmental sustainability, resource usage, energy efficiency, waste management, and the health and productivity of residents, workers, and visitors.
- b. Green building design, construction, and operation can have a significant, positive effect on resource conservation, energy efficiency, waste and pollution generation, and the health and productivity of a building's occupants over the life of the building.
- c. Green building benefits are spread throughout the systems and features of the building. Green buildings can include, among other things, the use of certified sustainable wood products; extensive use of high-recycled-content products; recycling of waste that occurs during deconstruction, demolition, and construction; orientation and design of a building to reduce the demand on the heating, ventilating, and air conditioning systems; the use of heating, ventilating, and air conditioning systems that provide energy efficiency and improved indoor air quality; enhancement of indoor air quality by selection and use of construction materials that do not emit

chemicals that are toxic or irritating to building occupants; the use of water conserving methods and equipment; and installation of alternative energy methods for supplemental energy production.

d. In recent years, green building design, construction and operational techniques have become increasingly widespread. Many homeowners, businesses, and building professionals have voluntarily sought to incorporate green building techniques into their projects. A number of local and national systems have been developed to serve as guides to green building practices. Requiring commercial and new residential projects to incorporate green building measures is appropriate to help achieve the public health and welfare benefits of green building.

Section 3. Findings Required by California Health & Safety Code Section 17958.5.

- a. The City of Hayward is located in Climate Zones 3 and 12 which is characterized by periods of extremely hot, dry weather during the summer and fall months. In addition, during the winter, the City of Hayward frequently experiences cold days with temperature inversions that trap certain air pollutants near the ground and exacerbate conditions leading to respiratory disease and other health risks. Hayward extends from the San Francisco Bay at its western edge eastward to the foothills near the City of Pleasanton. Average temperatures range from a low of 41 degrees in January to a high of 74 degrees in August, with even higher temperatures above 100 degrees recorded in the eastern portion of the City. Topography ranges from sea level at the Bay edge to over 1,800 feet in the highest portions in the eastern portion of the City. Hayward has a relatively high potential for air quality impacts during the summer and fall. When high pressure dominates, low mixing depths and bay and ocean wind patterns can concentrate and carry pollutants from other cities to Hayward, adding to the locally emitted pollutant mix. In winter and spring the air pollution potential in Hayward is moderate. These local features contribute to the Bay Area's status as a "nonattainment area" under the federal Clean Air Act for ozone and particulate matter.
- b. In June 2006, ICLEI Local Governments for Sustainability, in partnership with the Alameda County Waste Management Authority & Recycling Board (StopWaste.Org) and the Alameda County Conference of Mayors, launched the Alameda County Climate Protection Project. The City of Hayward committed to the project and embarked on an ongoing, coordinated effort to reduce the emissions that cause global warming, improve air quality, reduce waste, cut energy use and save money. As reflected in Hayward's Climate Action Plan, the City of Hayward is committed to reducing community-wide greenhouse gas emissions by 12½ percent below its 2005 emissions level by 2020 and 82½ percent below such levels by 2050. While climate change is a global problem influenced by an array of interrelated factors, climate change is also a local problem with serious impacts foreseen for California, the Bay Area, and City of Hayward. Local impacts include:
 - i. Sea level rise: According to the Union of Concerned Scientists, the sea level in the State of California is expected to rise up to 12 inches over the next hundred years. The Pew Center on Climate Change has reported that this would result in the erosion of beaches, bay shores and river deltas, marshes and wetlands and increased salinity of estuaries, marshes, rivers and aquifers. This increased salinity has the potential to damage or destroy crops in low-lying farmlands.

Infrastructure at or near sea level, such as harbors, bridges, roads and even the San Francisco International and Oakland International Airports are at risk of damage and destruction. The San Francisco Bay Area Conservation Commission has modeled the impact of a sea level rise of 3 feet (approximately 1 meter) on the San Francisco Bay Area. Areas such as the Oakland Airport would be under water, as would parts of Hayward along its shoreline, including portions of the City's wastewater treatment facilities.

- ii. Impacts on water: Water quality and quantity are at risk as a result of changing temperatures. With warmer average temperatures, more winter precipitation will fall in the form of rain instead of snow, shortening the winter snowfall season and accelerating the rate at which the snowpack melts in the spring. Not only does such snow melt increase the threat for spring flooding, it will decrease the Sierras' capacity as a natural water tower, resulting in decreased water availability for agricultural irrigation, hydroelectric generation and the general needs of a growing population. The Sierra snowpack is the origin of the Mokelumne River, the primary source of water for the jurisdictions within Alameda County.
- iii. Natural disasters: Climate models predict a 4°F temperature increase in the next 20 to 40 years, with an increase in the number of long dry spells, as well as a 20-30% increase in precipitation in the spring and fall. More frequent and heavier precipitation causes flooding and mudslides, which would result in considerable cost incurrence associated with damage to property, infrastructure and even human life. In addition, the increase of wildfires due to continued dry periods and high temperatures is another expected impact of continued climate change. In these conditions, fires burn hotter and spread faster. Portions of Hayward are located in an urban/wildland interface area.
- iv. Public health impact: Warming temperatures and increased precipitation can also encourage mosquito-breeding, thus engendering diseases that come with mosquitoes, such as the West Nile Virus, a disease of growing concern in the City of Hayward and the surrounding region. Heat waves are also expected to have a major impact on public health and be a contributing factor of mortality. Increased temperatures also pose a risk to human health when coupled with high concentrations of ground-level ozone and other air pollutants, which may lead to increased rates of asthma and other pulmonary diseases. The incidence of bad air days in California's urban areas has increased, mostly in hot summer days. In the summer of 2006, the Bay Area Air Quality Management District (BAAQMD) registered 11 Spare the Air days for the region and exceeded the California 1-hour standard for ozone (set at 90 ppb) 18 times.
- v. Impacts on plants and vegetation: Native plants and animals are also at risk as temperatures rise. Scientists are reporting more species moving to higher elevations or more northerly latitudes in response. Increased temperatures also provide a foothold for invasive species of weeds, insects and other threats to native

species. The increased flow and salinity of water resources could also seriously affect the food web and mating conditions for fish that are of both economic and recreational interest to residents. In addition, the natural cycle of plant's flowering and pollination, as well as the temperature conditions necessary for a thriving locally adapted agriculture could be affected, with perennial crops such as grapes taking years to recover.

- c. The City of Hayward's local climatic, topographic and geological conditions exacerbate the impacts of global climate change in several ways to make the adoption of green building requirements reasonable necessary:
 - i. Increasing summer temperatures increase the need for air conditioning, thereby increasing average load demand and peak load demand for energy within the City of Hayward. This heightened demand increases the risk of power outages and power shortages, with associated adverse public safety and economic impacts. Increased energy demand and usage also increases local and regional air pollution impacts. Decreasing energy consumption through energy efficiency and other green building techniques reduces each of these impacts.
 - ii. Increasing summer and year-round temperatures also adversely affects the City of Hayward's water supply, which is already subject to periodic drought conditions and potential water cutback. Decreasing water usage through conservation, sustainable landscaping (such as Bay-Friendly Landscaping), use of drought-tolerant and native plants, and other green building techniques reduces these adverse impacts.
- d. The City of Hayward finds that the design, construction, and maintenance of buildings and landscapes within Hayward can have a significant impact on Hayward's environmental sustainability, resource usage and efficiency, waste management, and the health and productivity of residents, workers and visitors to the City of Hayward.
- e. Green buildings play a significant role in reducing the amount of waste sent to landfills. Construction and demolition debris comprise up to 30% of all materials disposed of in California's landfills and over 21% of materials disposed of in Alameda County. Many of these materials have greenhouse gas implications once they are placed in landfills, related to both the process of organic materials breaking down in the landfill and producing methane and other greenhouse gasses, and the energy needed to produce more building materials from raw materials.
- f. This green building ordinance furthers Hayward's efforts to enhance the community's social, economic, and environmental well-being and to mitigate the efforts of global warming on Hayward's weather, water supply, physical infrastructure, ecological diversity, human health and economy.

<u>Section 4</u>. The City of Hayward's Municipal Code is hereby amended to repeal Article 22 to Chapter 10 in its entirety and replace it with the following:

"GREEN BUILDING REQUIREMENTS FOR PRIVATE DEVELOPMENT

SECTION 10-22.100 TITLE. This Article shall be known and may be cited as the Private Development Green Building Ordinance of the City of Hayward.

<u>SECTION 10-22.110 DEFINITIONS</u>. For the purposes of this Article, certain terms are defined as follows:

- a. "Applicant" means any individual, firm, Limited Liability Company, association, partnership, political subdivision, government agency, industry, public or private corporation or any other entity that applies to the City of Hayward for permit(s) to construct a Project subject to the provisions of this Article.
- b. "Build It Green" is a non-profit membership organization which developed the GreenPoint Rating Systems for Residential and Mixed Use occupancies in order to promote sustainable buildings.
- c. California Building Energy Efficiency Standard (Title 24, part 6) refers to the most recent enforced version of the coded section of the California Building Code.
 - d. "City" means the City of Hayward.
- e. "Commercial" means any building or space used for retail, industrial, office or other non-residential use.
 - f. "Covered Project" means any privately funded construction project, except as otherwise provided herein, for which an application for a building permit is received after August 1, 2009, or after the date the California Energy Commission and California Building Standards Commission approve green building standards required by this Article, whichever date is later, consisting of:
 - i. new construction, additions or remodels over 500 square feet for residential projects, or
 - ii. new construction, additions or remodels entailing 1,000 square feet or more of new or remodeled Commercial space.
- g. "Green building" means a whole systems approach to the design, construction, and operation of buildings and structures that helps mitigate the environmental, economic, and social impacts of construction, demolition and renovation. Green building practices recognize the relationship between natural and built environments and seek to minimize the use of energy, water, and other natural resources and provide a healthy, productive indoor environment.
- h. "GreenPoint Rated" is a third party rating system for homes based on a set of green building measures incorporated from Build It Green's Green Building Guidelines and used to evaluate a home's environmental performance. City staff shall maintain the most recent

version of Build It Green's GreenPoint Rated Checklists for Single Family, Multi-Family and Existing Homes and Residential Green Building Guidelines for New Home Construction, Home Remodeling and Multifamily Green Building.

- i. "Historical Building" means any structure or collection of structures deemed of importance to the history, architecture or culture of an area by an appropriate local or state governmental jurisdiction, pursuant to Section 18955 of the California Health and Safety Code and Section 8-201 of the 2007 California Historical Building Code, Title 24, Part 8.
- j. "LEED TM" and "LEED TM Checklist" mean the Leadership in Energy and Environmental Design rating system, certification methodology, and checklist used by the United States Green Building Council (USGBC). City staff shall maintain the most recent version of the LEED TM Rating system at all times.
- k. "Multi-family Residential Building" means a single residential building that has more than two dwelling units.
 - 1. "Mixed-Use" means a building with residential and commercial uses.

SECTION 10-22.120 APPLICATION.

The provisions of this Article apply to Covered Projects, with the following exemptions or exceptions:

- a. Historical Buildings, as defined by this Article.
- b. Permits issued only for foundation repair, re-roofing, repair of fire damage, work required by termite reports, upgrades for accessibility, or other items of building or structural maintenance as determined by the Building Official provided that these building projects comply with or are not subject to the California Building Energy Efficiency Standard (Title 24, part 6).
- c. Provided that projects still fully comply with the California Building Energy Efficiency Standard (Title 24, part 6), hardship exemptions may be granted by the Building Official for projects valued at less than \$50,000 where the Project Applicant can demonstrate the cost of complete compliance will exceed 20.0% of construction costs. In these cases, the applicant may limit compliance to 20.0% of the construction cost of the project.
- d. Provided that projects still fully comply with the California Building Energy Efficiency Standard (Title 24, part 6), exemptions or partial exemptions may be granted by the City Council for other projects where it can be demonstrated that complete compliance is not possible due to unusual building circumstances. This exemption is for other than economic considerations.

- e. Projects for which a Vesting Tentative Map has been approved by January 1, 2009 and for which there is full compliance with the California Building Energy Efficiency Standard (Title 24, part 6).
- f. Projects subject to a Development Agreement approved by January 1, 2009 and for which full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting has been documented, but without a Vesting Tentative Map, shall comply with the requirements of this Article if a building permit application is received on or after January 1, 2011.

SECTION 10-22.130 ALTERNATIVE GREEN BUILDING REQUIREMENTS.

The following green building requirements shall apply to all Covered Projects. Wherever reference is made to the Hayward checklist or Green Point Rated systems, a comparable equivalent rating system may be used if the Building Official finds the proposed alternate method is satisfactory and complies with the intent of this Article. The applicable systems are those in effect at the time a complete application for the Project is submitted to the Building or Planning Division. All Covered Projects must submit all required documentation to demonstrate compliance with the California Building Energy Efficiency Standard (Title 24, part 6).

SECTION 10 -22.140 STANDARDS FOR COMPLIANCE.

a. <u>Multi-Family Residential and Mixed-Use Buildings.</u>

Applicants for new Multi-Family Residential Covered Projects, prior to obtaining a Certificate of Occupancy, shall submit documentation demonstrating the building(s) has/have been GreenPoint Rated as well as all required documentation to demonstrate full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting. The Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

Prior to August 1, 2009, in order to promote familiarity with green building standards, applicants are encouraged to have their projects GeenPoint Rated, or to incorporate items, if any, from the checklist; however, only completing the list and submitting it is mandatory in addition to all required documentation to demonstrate full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting. For such projects that are GreenPoint Rated, the Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

These requirements shall also apply to Mixed-Use Covered Projects.

b. New Single Family Dwellings.

Applicants for new Single Family Covered Projects prior to obtaining a Certificate of Occupancy, shall submit documentation demonstrating the building(s) has/have been GreenPoint Rated as well as all required documentation to demonstrate full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting. The Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

Prior to August 1, 2009, in order to promote familiarity with green building standards, applicants are encouraged to have their projects GeenPoint Rated, or to incorporate items, if any, from the checklist; however, only completing the list and submitting it is mandatory in addition to all documentation required to demonstrate full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting. For such projects that are GreenPoint Rated, the Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

c. Residential Additions/Remodels Greater Than 500 Square Feet.

Applicants for residential Covered Projects consisting of remodels and/or additions greater than 500 square feet to existing residential single family or multi-family dwellings, shall submit, with their permit application, the GreenPoint Rated Existing Homes Checklist. The Applicant shall indicate on the plans and checklist if any of the items on the checklist have been incorporated into the project. Applicants are encouraged to have their projects GeenPoint Rated, or to incorporate items from the checklist; however, only completing the list and submitting it is mandatory in addition to all documentation required to demonstrate full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting. For such projects that are GreenPoint Rated, the Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

d. <u>Commercial Covered Projects</u>.

Applicants for new Commercial Covered projects shall submit with their permit application the City of Hayward checklist for Private Non-Residential Development. The plans shall clearly show where each item has been incorporated into the project. The plan review, to be conducted by City staff, shall verify the incorporation of checklist items into the plans. The building inspection process, to be conducted by City staff, shall verify the inclusion of these items in the construction. A Certificate of Occupancy shall not be issued until the incorporation of the checklist items and full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of

permitting is verified by City staff. The Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

Prior to August 1, 2009, applicants are encouraged to incorporate measures from the City of Hayward Checklist for Private Non-Residential Development into their projects in addition to submitting all required documentation to demonstrate full compliance with the California Building Energy Efficiency Standard (Title 24, part 6) at the time of permitting. For such projects that incorporate such measures, the Certificate of Occupancy shall state that the project complies with the City's Private Development Green Building Ordinance.

SECTION 10-22.150 PROMULGATION OF IMPLEMENTING REGULATIONS.

The City Manager shall promulgate any rules and regulations necessary or appropriate to achieve compliance with the requirements of this Article. The initial rules and regulations shall be promulgated after securing and reviewing comments from affected City departments. These rules and regulations shall ensure that the City of Hayward fully enforces both California Building Energy Efficiency Standard (Title 24, part 6) and this ordinance.

SECTION 10-22.160. COST EFFECTIVENESS STUDY.

Based upon the findings of a January 21, 2009, study entitled, "Energy Cost Effectiveness Case Studies Using the 2008 Title 24 Building Energy Efficiency Standards", adopted by the Stopwaste.org Board on April 22, 2009, the City Council has determined that the standards in this Article are cost effective and will require the diminution of energy consumption levels permitted by the 2008 Statewide energy efficiency standards."

Section 5. Severance. Should any part of this ordinance be declared by a final decision by a court or tribunal of competent jurisdiction to be unconstitutional, invalid, or beyond the authority of the City, such decision shall not affect the validity of the remainder of this ordinance, which shall continue in full force and effect, provided that the remainder of the ordinance, absent the unexcised portion, can be reasonably interpreted to give effect to the intentions of the City Council.

Section 6. Annual Review. The City Council shall review this ordinance at least annually to determine whether it needs to be updated because of new legislation enacted by the State or new standards developed by the California Energy Commission, or other applicable organizations, such as StopWaste.org, Build It Green, and LEED (Leadership in Energy and Environmental Design). The Building Official shall annually report to the City Manager the number and types of projects built under this ordinance.

<u>Section 7</u>. In accordance with the provisions of Section 620 of the City Charter, this ordinance shall become effective thirty days after adoption.

INTRODUCED at a regular meeting of the City Council of the City of Hayward, held the <u>3rd_day of November</u>, 2009, by Council Member <u>Henson</u>.

ADOPTED at a regular meeting of the City Council of the City of Hayward held the 15th day of December, 2009, by the following votes of members of said City Council.

AYES:

COUNCIL MEMBERS: Zermeño, Quirk, Halliday, May, Dowling, Henson

MAYOR: Sweeney

NOES:

COUNCIL MEMBERS: None

ABSTAIN:

COUNCIL MEMBERS: None

ABSENT:

COUNCIL MEMBERS: None

APPROVED:

Mayor of the City of Hayw

DATE:

December 18, 2009

ATTEST

City Clerk of the City of Hayward

APPROVED AS TO FORM:

City Attorney of the City of Hayward